

## CLAIMS

What is claimed is:

1. An architecture system operable on a processor comprising:  
a first architecture layer;  
a second architecture layer; and  
a transparent layer between the first architecture layer and the second  
architecture layer, the transparent layer enabling the first architecture  
layer and the second architecture layer to communicate directly  
without having to communicate via the transparent layer.

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2. An architecture system operable on a processor comprising:

a plurality of architecture layer objects comprising at least a first layer object, a second layer object, and a transparent layer object, the transparent layer object layered between the first layer object and the second layer object, the transparent layer object configured to be hidden for a communication between the first layer object and the second layer object;

wherein the first layer object and the second layer object are configured to relay the communication between each other by bypassing the transparent layer object.

3. The system of claim 2 wherein the communication comprises at least one member of a group comprising a control message, data, and the control message and the data.

4. The system of claim 2 wherein the first layer object is configured to transmit the communication to the second layer object.

5. The system of claim 2 wherein the second layer object is configured to transmit the communication to the first layer object.

6. The system of claim 2 wherein the architecture system is configured to collapse the transparent layer object when the first layer object and the second layer object relay the communication.

7. The system of claim 2 further comprising a plurality of transparent layer objects between the first layer object and the second layer object, wherein the first

30 layer object and the second layer object are configured to relay the communication to each other by bypassing the plurality of transparent layer objects.

8. The system of claim 2 wherein the communication comprises data.

9. The system of claim 8 further comprising a user interface attachable to the first layer and configured to receive data, to transmit the data to the first layer  
35 object, to receive other data from the first layer, and to render the other data.

10. The system of claim 9 wherein the user interface comprises a selected user interface type dynamically selectable and dynamically interchangeable from a plurality of user interface types.

11. The system of claim 10 wherein the selected user interface type  
40 comprises at least one member of a group comprising a graphical user interface, a web enabled interface, a handheld device interface, a voice simulation interface, a voice response interface, a voice activated interface, a voice recognition interface, and an audio interface.

12. The system of claim 2 further comprising a database interface  
45 attachable to the second layer and configured to communicate with the second layer and to communicate with a plurality of databases, each database having a different database type.

13. The system of claim 12 wherein the database interface is configured to communicate with at least one member of a group comprising a structured query  
50 language database, an Oracle database, a DB2 database, and an XML-based database.

14. An architecture system operable on a processor comprising:

an action province configured with logic to process an action and to generate at least one query requesting data;

a yoke province configured receive the query from the action province, to dynamically identify a database with a database type to which the query corresponds, to initiate a connection with the database to transmit the query to the database, to retrieve data in response to the query, and to transmit the data to the action province; and

a witness province configured to identify the action occurring via an input/output interface and to notify with the action at least one member of a group comprising the action province and the yoke interface;

wherein at least one member of a group comprising the witness province, the action province, and the action province comprises at least one transparent layer configured to enable communication with a surrounding layer without having to communicate via the transparent layer.

15. The system of claim 14 wherein the witness province is configured to dynamically support a plurality of user interfaces, each having a different interface type.

16. The system of claim 14 wherein the action province comprises:

an UGLI layer object configured to apply logic to the action and to direct transfers of the action and the query;

a repository layer configured to store the data;

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an initiation layer configured to initiate storage and retrieval of the data to  
and from the database by identifying the database and generating the  
query for the database; and

an optimization layer configured to format the query generated from the  
persistent layer to the database format required by the database.

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17. The system of claim 14 wherein the witness province comprises:

a collection layer object configured to operate as a communication  
interface to receive the action and to render second data;

an envoy layer object configured to receive the action from the collection  
layer, to condition action to a first form receivable by a lower layer,  
to receive the second data, and to condition the second data to a  
second form receivable by the collection layer;

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a naturalization layer object configured to apply at least one member of a  
group comprising style support, customization support, and language  
support to the action or the second data and to transmit the second

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data to the envoy layer object; and  
a terminal layer object configured to portal the action or the second data  
between the action province and at least one member of a group  
comprising the collection layer, the envoy layer, and the  
naturalization layer.

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18. The system of claim 14 wherein the witness yoke province comprises a nomadic layer object configured to make a connection to the database and to pass the query to the database.

19. An architecture system operable on a processor comprising:

a collection layer configured to support a first set of objects that operate as

100 a communication interface to receive first data and to render second data;

an envoy layer configured to support a second set of objects to receive the

first data from the collection layer, to condition the first data to a

first form receivable by a lower layer, to receive the second data, and

105 to condition the second data to a second form receivable by the collection layer;

a naturalization layer configured to support a third set of objects to apply

at least one member of a group comprising style support,

customization support, and language support to the first data or the

110 second data;

an UGLI layer configured to support a fourth set of objects configured to

apply logic to the first data or the second data and to direct transfers

of the first data and the second data;

a terminal layer configured to support a fifth set of objects configured to

115 portal the first data or the second data between the UGLI layer and at

least one member of a group comprising the collection layer, the

envoy layer, and the naturalization layer;

a repository layer configured to support a sixth set of objects configured to

store the first data or the second data;

120 an initiation layer configured to support a seventh set of objects configured  
to initiate storage and retrieval of the first data or the second data to  
and from a persistent storage by identifying the persistent storage  
and generating a command for the persistent storage;  
an optimization layer configured to support an eighth set of objects  
125 configured to format the command generated from the initiation  
layer to a database format required by the persistent storage; and  
a nomadic layer configured to support a ninth set of objects configured to  
make a connection to the persistent storage and to pass the formatted  
command to the persistent storage;  
130 wherein at least one of the layers is configured as a transparent layer to  
enable communication between at least two of the other layers  
without having to communicate via the transparent layer.

20. The system of claim 19 wherein the communication interface  
comprises at least one member of a group comprising a graphical user interface, a web  
135 enabled interface, a handheld device interface, a voice simulation interface, a voice  
response interface, a voice activated interface, a voice recognition interface, and an audio  
interface.

21. The system of claim 19 wherein the optimization layer eighth set of  
objects further is configured to format other data received from the persistent storage to  
140 another format receivable by the initiation layer.



22. The system of claim 19 wherein the nomadic layer ninth set of objects further are configured to receive other data in response to the formatted command and to pass the other data to the optimization layer.

23. The system of claim 19 wherein the persistent storage comprises at least one member of a group comprising a structured query language database, an Oracle database, a DB2 database, and an XML-based database.

24. An architecture system operable on a processor comprising:

a collection layer object configured to operate as a communication interface to receive first data and to render second data;

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a naturalization layer object configured to apply at least one member of a group comprising style support, customization support, and language support to the first data or the second data;

an envoy layer object configured to receive the first data from the collection layer, to condition the first data to a first form receivable by the naturalization layer, to receive the second data, and to condition the second data to a second form receivable by the collection layer;

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an UGLI layer object configured to apply logic to the first data or the second data and to direct transfers of the first data and the second data;

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a terminal layer object configured to portal the first data or the second data between the UGLI layer and at least one member of a group comprising the collection layer, the envoy layer, and the naturalization layer;

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a repository layer object configured to store the first data or the second data;

an initiation layer object configured to initiate storage and retrieval of the first data or second data to and from a persistent storage by

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identifying the persistent storage and generating a command for the persistent storage;

an optimization layer object configured to format the command generated from the initiation layer to a database format required by the persistent storage; and

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a nomadic layer object configured to make a connection to the persistent storage and to pass the formatted command to the persistent storage; wherein at least one of the layer objects is configured as a transparent layer object to enable communication between at least two of the other layer objects without having to communicate via the transparent layer object.